

R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

SUPPORT FOR CLAIM AMENDMENTS

Support for the amendments to claims 1, 12, 13, 14, 15 and 20 can be found in the specification on page 12, lines 15-21, page 21, lines 4-9, page 26, lines 9-19 and page 30, lines 15-18. As such, no new matter has been added.

CLAIM REJECTIONS UNDER 35 U.S.C. §101

The rejection of claims 13-20 under 35 U.S.C. §101 has been obviated by the amendment suggested by the examiner and should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claims 1-2 and 5-20 under 35 U.S.C. §103 as being unpatentable over Sun in view of "Working Draft Number 2 Revision 2" (hereinafter WD2) has been obviated by amendment and should be withdrawn.

Sun teaches a system and method for lossless video coding (title). WD2 teaches a reference coding method to be used for the development of a new video compression method called JVT Coding.

In contrast, claim 1 of the present invention provides an apparatus comprising a first processing circuit and a second processing circuit. The first processing circuit may be configured to generate a plurality of reconstructed samples in response to one or more macroblocks of an input signal. The second processing circuit may be configured to determine a unique intra prediction chroma predictor for each chroma sub-block of a current macroblock in response to available reconstructed samples adjacent to the current macroblock. Claims 12 and 13 provide similar limitations. Neither Sun, nor WD2, teach or suggest all of the limitations of the present invention.

In particular, Sun is silent regarding the use of determining predictors unique to each sub-block within the macroblock. Sun teaches creating a prediction macroblock based on previous and current pixel information from input macroblocks. During each iteration of input macroblocks, the prediction macroblocks of Sun are subtracted from the input macroblocks. Sun adds this difference to the next iteration of the prediction macroblocks. The prediction macroblocks of Sun are therefore based on the combination of the previous pixel information that have passed through the macroblocks. Therefore, Sun teaches away from the present invention, which evaluates each sub-block within each macroblock, creating unique predictors for each sub-block.

Furthermore, although WD2 teaches sub-blocks, WD2 does not cure the deficiencies of Sun. WD2 teaches a method where sub-blocks within an 8x8 block are evaluated based on the sample availability of the 8x8 block. The approach of WD2 yields a predictor used on all sub-blocks based on the samples available to the 8x8 blocks. The present invention determines a unique intra prediction chroma mode 0 predictor for each chroma sub-block of a current macroblock in response to available reconstructed samples adjacent to said current macroblock. Unlike Sun and WD2, the claimed predictors do not depend on the same sample. The present invention provides a unique intra prediction predictor for each chroma sub-block of a current macroblock to be selected independently in response to the available reconstructed samples adjacent to the current macroblock. Therefore Sun in view of WD2 does not teach or suggest the presently claimed invention and the rejection should be withdrawn.

The rejection of claims 3 and 4 under 35 U.S.C. §103 as being unpatentable over Sun and WD2 in view of Joch et al. is respectfully traversed and should be withdrawn.

Claims 3 and 4 depend, directly or indirectly, from claim 1, which is believed to be allowable.

As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicants' representative between the hours of 9 a.m. and 5 p.m. ET at 586-498-0670 should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge Deposit Account No. 12-2252.

Respectfully submitted,
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Dated: June 12, 2007

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Docket No.: 03-044 / 1496.00308